# **JI ROOF 1000**

Insulated panels (PIR core)

MR046 / 1116







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## JI Roof 1000

Insulated panels (PIR core)

The JI Roof 1000 is a very diverse user product For not only Industrial, bit also residential or Agricultural Application.

Due to its trapezoidal outer sheet It is ideal to take additional loads such as solar panels or even roof files.

The Joris Ide group, more than 3 decades of experience, processes 300.000 tonnes of steel per year, has 17 production sites over 8 countries with the help of more than 1000 employees. Joris Ide, your dedicated partner.



II Roof 1000 used in a renovation project



JI Roof 1000 in agricultural projects.



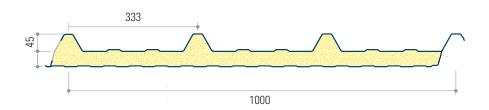
The JI Roof 1000 can be produced in a multitude of lengths.





## Description

The JI Roof 1000 LPCB certified Trapezoidal Insulated Roof Panel is used for pitched roofs or horizontal and vertical wall application and an external insulated cladding panel for industrial, commercial and public buildings. Due to its metal inner and outer sheet, it combines thermal resistance with big spans. The minimum pitch to be applied is 4° or more after deflection. (See construction detail p.7)



## Weight and thermal performance

Core thickness (mm)	40	60	80	100	120	150
Overall thickness (mm)	85	105	125	145	165	195
U-value (W/m²K)	0,46	0,35	0,25	0,20	0,16	0,14
Weight (Kg/m²	11,71	12,51	13,30	14,10	14,89	16,09

U-values are calculated in accordance with the method required by Part L2 (England and Wales) Building Regulations and Section 6 (Scotland) Technical Hand

## **System key benefits**

- Applicable as roof and wall panel for renovations and new buildings.
- Easy handling, mounting and fitting.
- Composite panel allows a faster installation time than standard built-up systems.
- JI Roof 1000 is produced according to the EN ISO 9001.
- The JI Roof 1000 is CE-marked.
- Approved product by LPCB (Loss Prevention Certification Board) (40 to 120 mm core thickness)
- Wide range of colours and coatings available for top sheet according to your project (please consult our Colorflow)
- Production facility ISO 14001 certified.

- High thermal performance PIR foam.
- Environmental sustainable PIR foam with zero ozone depletion and a low global warming potential
- Inner sheet comes as standard in 15  $\mu$  Polyester with a RAL 9002 colour.
- JI Roof 1000 PIR comes standard with a factory applied seal on the side lap.
- JI Roof 1000 is available in lengths up to 16 m The minimum cut back is 50 mm.
- Integrated insulated polycarbonate roof lights are available.
- Matching single skin profiles in metal or polycarbonate are available.

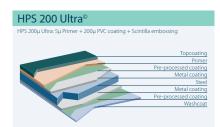


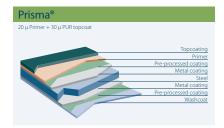
## Materials

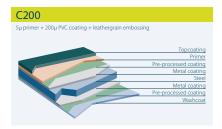
#### A1. External weather sheet

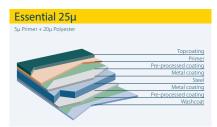
Joris Ide offers one of the widest ranges in coatings and colours which can be defined per project and building requirements. Please consult our colorflow brochure for detailed information.

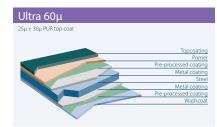












#### A2. Internal liner sheet

Internal conditions of a building can vary; Joris Ide can offer a wide range to suit heavy-duty environments such as humidity and ammoniac. Please consult our colorflow brochure for detailed information.

- 15 μ Polyester RAL 9002 (standard)
- 25 μ Polyester
- Colorfarm 35µ
- PVC Foodsafe 150 μ PVC
- Aluminium
- HPS 200 μ.

#### A3. Insulation core

JI Roof 1000 insulated panels are made with a high thermal performance and environmental sustainable PIR foam with zero ozone depletion and a low global warming potential.





## Confidex® Guarantee by Tata Steel

For over 20 years the Confidex® Guarantee from Tata Steel has remained best in class. Confidex® is the product performance guarantee for Colorcoat HPS200 Ultra® and Colorcoat Prisma®, when used in an external conventional building envelope application namely roof and wall cladding using single skin, built-up or composite panel construction in industrial and commercial buildings. Confidex® offers the longest and most comprehensive guarantee for pre-finished steel in Europe.

#### **Key features include;**

- Extended guarantee cover for up to 40 years on Colorcoat HPS200 Ultra® and up to 30 years on Colorcoat Prisma®.
- No requirement for annual inspections or maintenance to validate the guarantee.
- Covers cut edges produced under factory controlled conditions for the entire guarantee period.
- Backed by years of worldwide product testing and real world experience.
- Provides cover for roof pitches down to 1° and no distinction between different roof pitches above that
- Offered directly to the building owner and provides a contractual relationship between Tata Steel and the building owner.
- Fully transferable should building ownership change.
- Helps reduce the level of risk for each part of the supply chain.
- Quick and simple online registration form.

# With Confidex® registration Without Confidex® registration





#### **Other warranties**

Whilst Confidex® has always been restricted to the weathering performance of the external cladding, Tata Steel has recognised the growing emergence of demanding internal environment projects, such as energy from waste plants, and may offer a non-Confidex® warranty on a case by case basis for Colorcoat HPS200 Ultra® used internally.

Application specific warranties are also available for non-standard cladding applications; i.e residential roofs, flashings and sectional roller shutter doors.

# Regions covered by the Confidex® Guarantee



#### **Notes**

- Figures under the Coastal heading are for buildings within 1 km of any coast.
- Full terms and conditions of the Confidex® Guarantee are on the online application form, available from www.colorcoat-online.com/registration
- Confidex® must be registered within 3 months of the building completion date for the guarantee to be valid.
- The Confidex® Guarantee periods on the diagram above are applicable to Zone 1 and Zone 2. For more information visit www.colorcoat-online.com/ confidexmap

Colorcoat HPS200 Ultra, Colorcoat Prisma, Confidex are trademarks of Tata Steel UK Limited.







## **Performance**

#### **Environmental**

The JI Roof 1000 corresponds to the BRE Global Green Guide online generic specification Galvanised steel rafters and joists, composite profiled roof cladding (steel inner lining, pentane blown PUR/PIR insulation, coated steel outer skin) (ref. 812550001) which achieves a summary rating of A+ within pitched roofs. The production facility is ISO 14001 certified.

#### Fire

The external and internal faces of the panel are Class 0 in accordance with the Building Regulations when tested to BS476: Parts 6: 1989 and Part 7: 1987. The JI Roof 1000 has a LPCB (Loss Prevention Certification Board EXT-B Grade (certificate No: 700a to LPS181: Part 1: Issue 1) for 40-150mm core thickness.

Panel	Application Gaug		Gauge	auge Fire resistance*			Core	LPCB
Panei	Roof	Wall	(mm)	Integrity (min)	Insulation (min)	Grade	Core	LFCB
JI Roof 1000	•	•	40-120	-	-	EXT-B	PIR	700a/09
JI Roof 1000		• **	60-120	67	17	EXT-A15	PIR	700a/10
JI Roof 1000	•	•	100-120	-	-	EXT-B	PIR	700a/11

 $<sup>{\</sup>bf *Please\ check\ redbooklive\ (www.redbooklive.com)\ for\ notes\ on\ installation}$ 

#### **Accoustic**

Hz	125	250	500	1K	2K	4K
SRI 80 mm	17	19	23	26	27	55
SRI 100 mm	17	20	24	25	35	55
SRI 120 mm	17	20	23	23	39	54

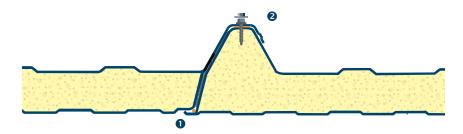
 $For \ different \ thicknesses, \ please \ contact \ our \ technical \ team.$ 



<sup>\*\*</sup> Only horizontal

# Dimensions and tolerances

Minimum cutback: 50 mm – maximum cutback: 350 mm (no cutback on demand) Cutback 10 mm for wall application (on demand) Panels can be manufactured for placing left to right and right to left as per your requirements.

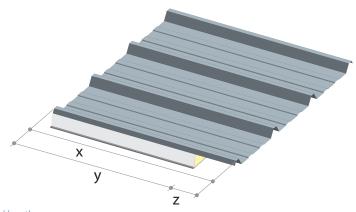


- 1. Seal in the side lap.
- Seal under the crown of the overlap.

## Minimum insulation length of panels

40 mm	2000
60 mm	1900
80 mm	1800
100 mm	1800
120 mm	1800
150 mm	1800

# Cut-back system



- x. Panel length
- y. Insulation length
- z. Cut-back

## **Product tolerance**

Length < 3000 mm	± 5 mm
Length > 3000 mm	± 10 mm
Width (mm)	± 2 mm
Gauge (mm)	± 2 mm

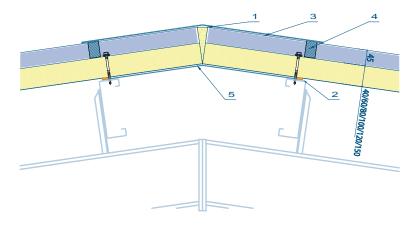
Product tolerances [ According to EN 14509]



# Construction details

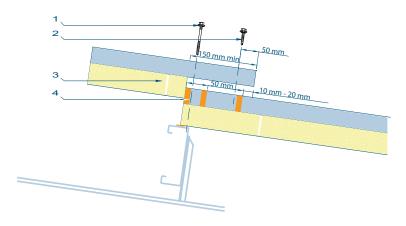
## Ridge detail

- Canister applied foam insulation
  9mm x 3mm butyl seal
- 3. External flashing
- 4. Profiled filler
- 5. Internal flashing with 150mm overlap sealed with



# Overlap detail

- 1. Main panel fastener in each valley
- Stitcher screw in each crown
  Ji roof 1000 pir lpcb approved trapezoidal roof panel
- 4. Butyl rubber sealants

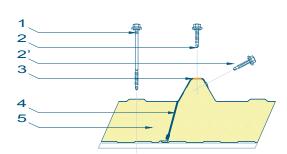


	Pitch (°)	Minimum end lap (mm) *	Butyl side lap	Stitches (mm)	Number of butyl cords end lap
4	≤ p <	200	Yes	450	3
6	≤ p <	150	Yes	450	2
11	≤ p <	150	Yes	450	2
21	≤ p	100	Yes	450	2

\* In case of an overlap of two sheets

## Side lap detail

- Main panel fastener in each valley
  Stitcher screw in each crown (max. 450 mm centers)
- 2'. For wall applications
- Butly I rubber sealant (site-applied) and compressible factory applied seal
  Compressible factory applied seal
  Ji Roof 1000 pir LPCB approved trapezoidal roof panel





## Certifications, quality and durability

The JI Roof 1000 is manufactured according to the ISO 9001 and is assembled from high-quality raw materials which are selected by a detailed supply chain management and in-house laboratory controls. The Joris Ide plant in Zwevezele is ISO 14001 certified. The product is produced to the highest quality standards such as EN 14509. The JI roof 1000 carries the product conformity according to the European legislation and therefore all packs are CE-marked and carry the Declaration of Performance..



Assessed to ISO 9001 LPCB ref. N° 700



Assessed to ISO 14001 LPCB ref. N° 700-EMS



LPS1181: Part 1: Issue 1 Cert/LPCB 700a



#### Accessories

Joris Ide can supply accessories such as foam fillers, flashings, matching outer single skin sheets and integrated polycarbonate roof lights.

## **Maintenance composite panels**

Joris Ide advises to do an annual inspection of the panels and to carry out any remedial work identified during inspection.

The maintenance & cleaning frequency is dependant on the application environment and actual pollution conditions of the composite panel. Exterior used panels need to be cleaned once per year. For interior used panels, the cleaning is dependant on the actual pollution conditions.

The cleaning of building walls should be made from up to down manually or by suitable cleaning facilities. Please notice that any cleaner which includes corrosive material is forbidden to be used for the cleaning. Specific cleaning processes as follow:

- Use plenty of clean water to wash the panel's surface:
- Use soft cloth with diluted detergent to wipe the panel's surface softly;
- Use clean water again to wash the stains off;
- Check the panel's surface and special cleaning with detergent is needed, if some parts are still not clean;
- Use clear water to wash the panels' surface till all stains have been washed out.

#### **Notice:**

Please don't clean if the panel's surface is hot (over 40 °C) because too fast volatility of the water will do harm to the coating. Please notice especially that suitable detergent should be chosen. Generally neutral detergent is OK. Please don't use strong alkaline detergent, such as potassium hydroxide, sodium hydroxide and also please don't use strong acid detergent, abrasive detergent and paint soluble detergent. We would suggest to clean a small part as an experiment before carrying out thorough cleaning of the whole project.





JI Roof 1000 used in a residential project.



JI Roof 1000, detail view.



Detail view of the insulation.





